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## A LOW POWER PROGRAMMABLE DIGITAL FILTER

## ABSTRACT OF THE DISCLOSURE

A low power programmable digital filter integrated circuit architecture has a programmable front end servicing up to 4 digital sources. Changing the programming of the front end permits digital outputs from different sensor types to be accommodated. Digital filtering is accomplished using a digital signal processor that is programmable to accommodate different decimation ratios. A serial data output register receives the filtered digital signals and provides them to an output port. The digital filter integrated circuit may be connected in a token passing configuration with other digital filter integrated circuits to increase the number of sources accommodated.